

WHAT IS CLAIMED IS:

1 1. A method of detecting a breast cancer-associated transcript in a cell
2 from a patient, the method comprising contacting a biological sample from the patient with a
3 polynucleotide that selectively hybridizes to a sequence at least 80% identical to a sequence
4 as shown in Tables 1-25.

1 2. The method of claim 1, wherein the biological sample comprises
2 isolated nucleic acids.

1 3. The method of claim 2, wherein the nucleic acids are mRNA.

1 4. The method of claim 2, further comprising the step of amplifying
2 nucleic acids before the step of contacting the biological sample with the polynucleotide.

1 5. The method of claim 1, wherein the polynucleotide comprises a
2 sequence as shown in Tables 1-25.

1 6. The method of claim 1, wherein the polynucleotide is immobilized on
2 a solid surface.

1 7. The method of claim 1, wherein the patient is undergoing a therapeutic
2 regimen to treat breast cancer.

1 8. The method of claim 1, wherein the patient is suspected of having
2 breast cancer.

1 9. An isolated nucleic acid molecule consisting of a polynucleotide
2 sequence as shown in Tables 1-25.

1 10. The nucleic acid molecule of claim 9, which is labeled.

1 11. An expression vector comprising the nucleic acid of claim 9.

1 12. A host cell comprising the expression vector of claim 11.

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- 1 13. An isolated polypeptide which is encoded by a nucleic acid molecule
2 having polynucleotide sequence as shown in Tables 1-25.

- 1 14. An antibody that specifically binds a polypeptide of claim 13.

- 1 15. The antibody of claim 14, further conjugated to an effector component.

- 1 16. The antibody of claim 15, wherein the effector component is a
2 fluorescent label.

- 1 17. The antibody of claim 15, wherein the effector component is a
2 radioisotope or a cytotoxic chemical.

- 1 18. The antibody of claim 15, which is an antibody fragment.

- 1 19. The antibody of claim 15, which is a humanized antibody

- 1 20. A method of detecting a breast cancer cell in a biological sample from
2 a patient, the method comprising contacting the biological sample with an antibody of claim
3 14.

- 1 21. The method of claim 20, wherein the antibody is further conjugated to
2 an effector component.

- 1 22. The method of claim 21, wherein the effector component is a
2 fluorescent label.

- 1 23. A method for identifying a compound that modulates a breast cancer-
2 associated polypeptide, the method comprising the steps of:
3 (i) contacting the compound with a breast cancer-associated polypeptide, the
4 polypeptide encoded by a polynucleotide that selectively hybridizes to a sequence at least
5 80% identical to a sequence as shown in Tables 1-25; and
6 (ii) determining the functional effect of the compound upon the polypeptide.

- 1 24. A drug screening assay comprising the steps of

- 2 (i) administering a test compound to a mammal having breast cancer or a cell
3 isolated therefrom;
- 4 (ii) comparing the level of gene expression of a polynucleotide that selectively
5 hybridizes to a sequence at least 80% identical to a sequence as shown in Tables 1-25 in a
6 treated cell or mammal with the level of gene expression of the polynucleotide in a control
7 cell or mammal, wherein a test compound that modulates the level of expression of the
8 polynucleotide is a candidate for the treatment of breast cancer.

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